NHS
Ambulatory Emergency Care Network

Ambulatory Emergency Care

Motivated to change: Bradford's determination drives AEC improvement

www.ambulatoryemergencycare.org.uk

Introduction

In recent years, same day emergency care (SDEC) has been one of the NHS' success stories, helping to ease pressure on overloaded Emergency Departments (EDs). The Ambulatory Emergency Care (AEC) Network has worked with more than 120 healthcare teams across England and Wales, supporting them to establish or expand ambulatory emergency care within their organisations. There have been many excellent results.

But, even when an ambulatory care service begins well, it can plateau. Initial enthusiasm may start to wane, the original mission may drift and impacts can begin to lessen. This is why the AEC Accelerator Programme was established. The AEC Network, which runs the programme, aims to support organisations to re-energise their AEC service. The Network works alongside organisations to help maximise AEC as an alternative to admission, improving patient flow and reducing pressure on hospital beds.

Bradford Teaching Hospitals NHS Foundation Trust was one of the first tranche of hospitals to join the AEC Accelerator Programme in 2019. This is their story.

Bradford Teaching Hospitals serves a population of around 500,000 in Bradford and communities across Yorkshire. It has 5,500 staff working across Bradford Royal Infirmary (which provides most of the inpatient services) and St Luke's Hospital (which mostly offers outpatient and rehabilitation services). There are local community hospitals at Eccleshill, Westwood Park, Westbourne Green and Shipley. In 2019, it became the first healthcare organisation in Europe to implement a Command Centre to transform patient flow in its hospitals.

Background

Dedicated ACU

Bradford Teaching Hospitals NHS FT began its AEC journey in 2016 with the opening of a dedicated Ambulatory Care Unit (ACU), located outside the ED. Staff in ACU in-reach into ED and the service also pulls patients from the bed bureau via telephone referrals. The ACU is open from 8am to 8pm Monday to Saturday. It is staffed by a consultant, two registered nurses, two healthcare assistants, a junior doctor, an Advanced Clinical Practitioner (ACP) and trainee ACPs.

ACE project

In 2018, the Trust won the prestigious HSJ Improvement in Emergency and Urgent Care Award for its Children and Young Person's Ambulatory Care Experience (ACE) project, based at Bradford Royal Infirmary. This provides a community nursing team to treat children up to 16 years of age.

New clinics

In 2019, Bradford established several new clinics: a nurse-led returners' clinic for patients who had been discharged from the hospital, consultant-led hot clinics which allow patients with a range of emergency conditions to be treated as outpatients and a Same Day Emergency Clinic, which provided same-day treatment for patients with a range of conditions. Conditions treated in the Same Day Emergency Clinic include low risk chest pain, acute headache, cellulitis of a limb, some respiratory conditions, anaemia, tachycardia and many others.

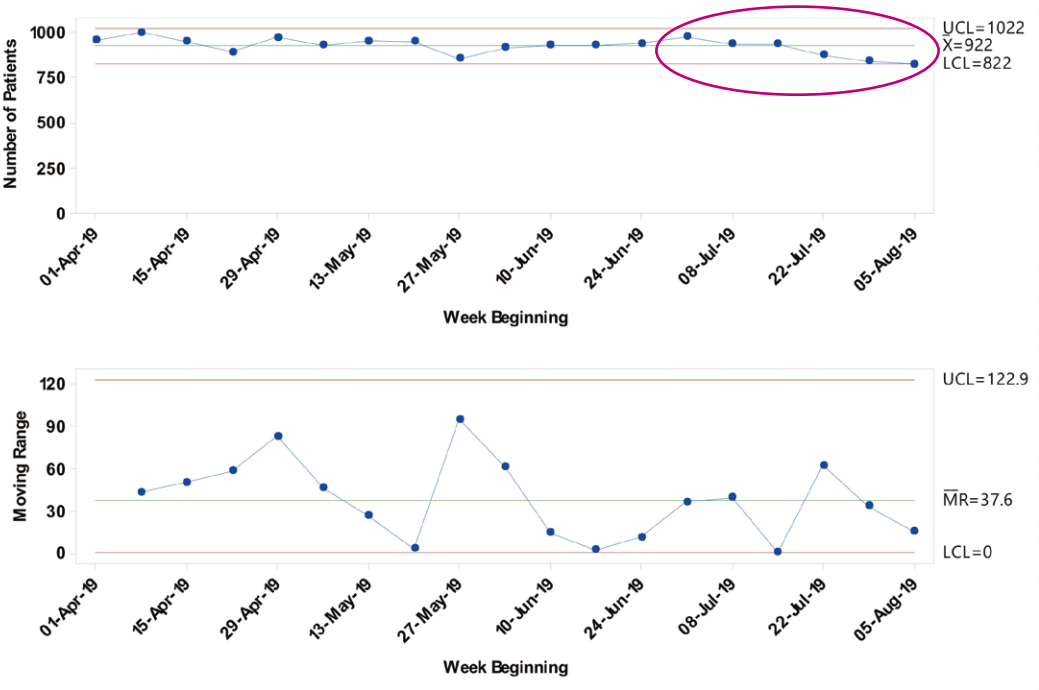
Joining the AEC Accelerator programme

Bradford Teaching Hospitals NHS FT began its journey with the AEC Accelerator programme in September 2019. Associates from the programme analysed the Trust's AEC and ED activity datasets to understand current utilisation and assessed the non-elective admitted dataset to ascertain the potential for further appropriate AEC activity. They also carried out a case file review of 50 randomised patient episodes to identify themes in current flow. This information was triangulated and the Trust received feedback from the programme later the same month. As part of the programme, the Bradford team also participated in two site-specific workshops on measurement and patient selection and a regional workshop focusing on clinical modelling.

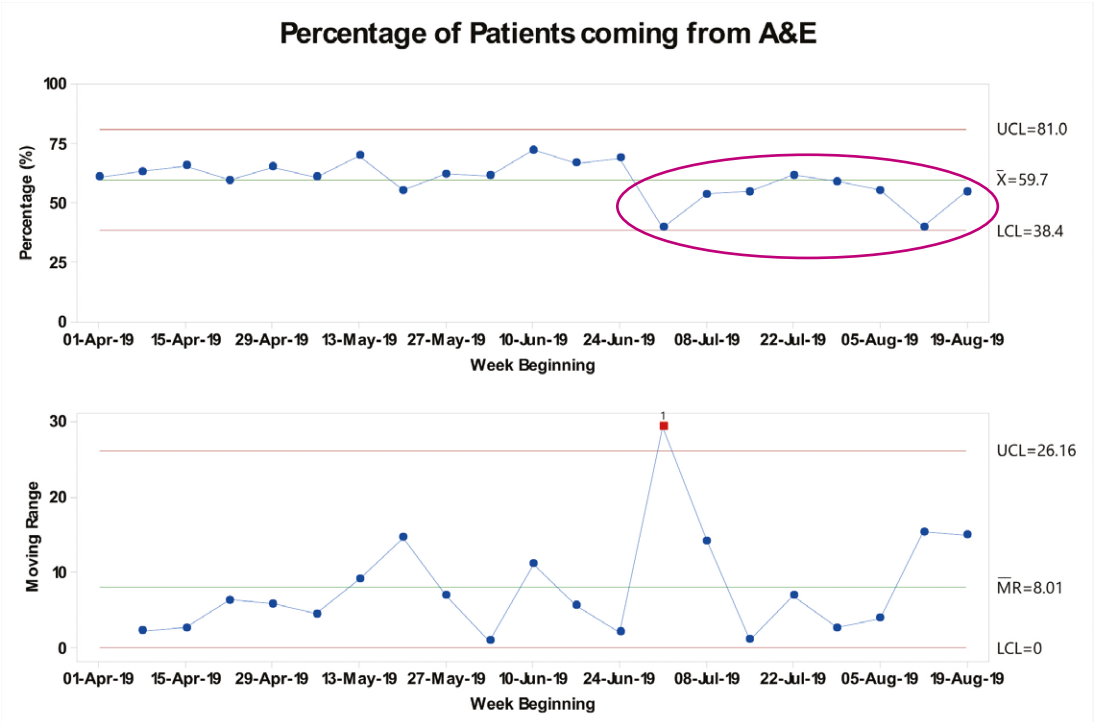
What the data showed

Data analysis was carried out for 57,136 patients who were admitted or attended ACU from 1 April to 27 August 2019. This revealed that 97% were not seen in AEC and of those 32% matched criteria laid out in the AEC Directory.

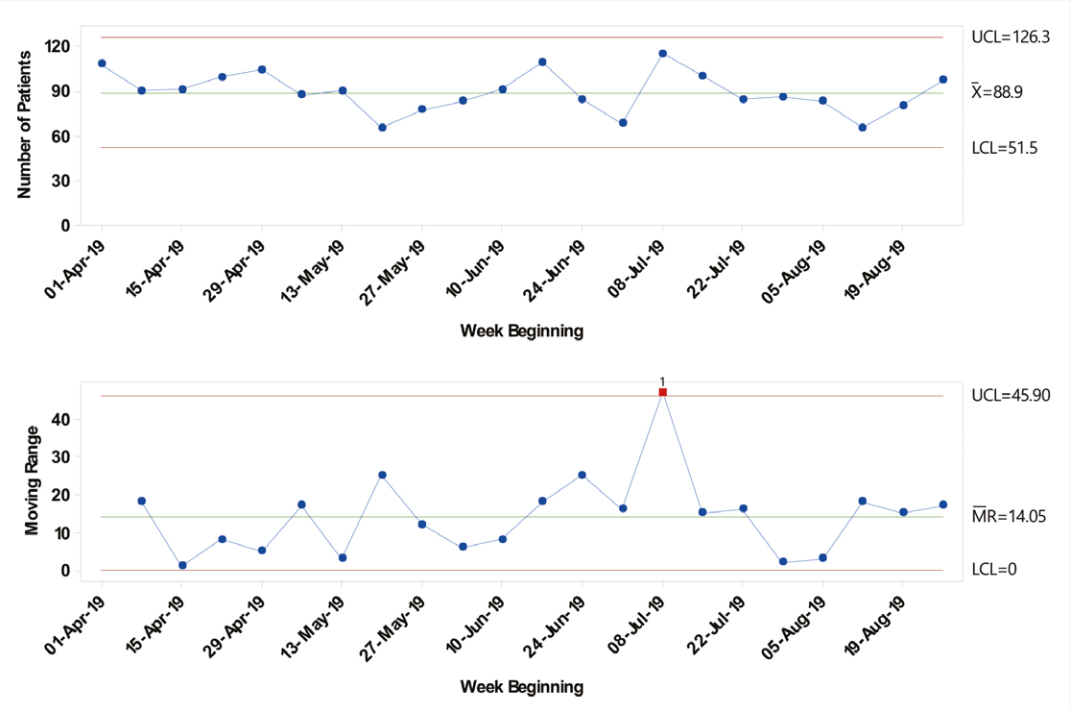
On average, the data showed that 922 patients per week could have been seen in AEC but were not.



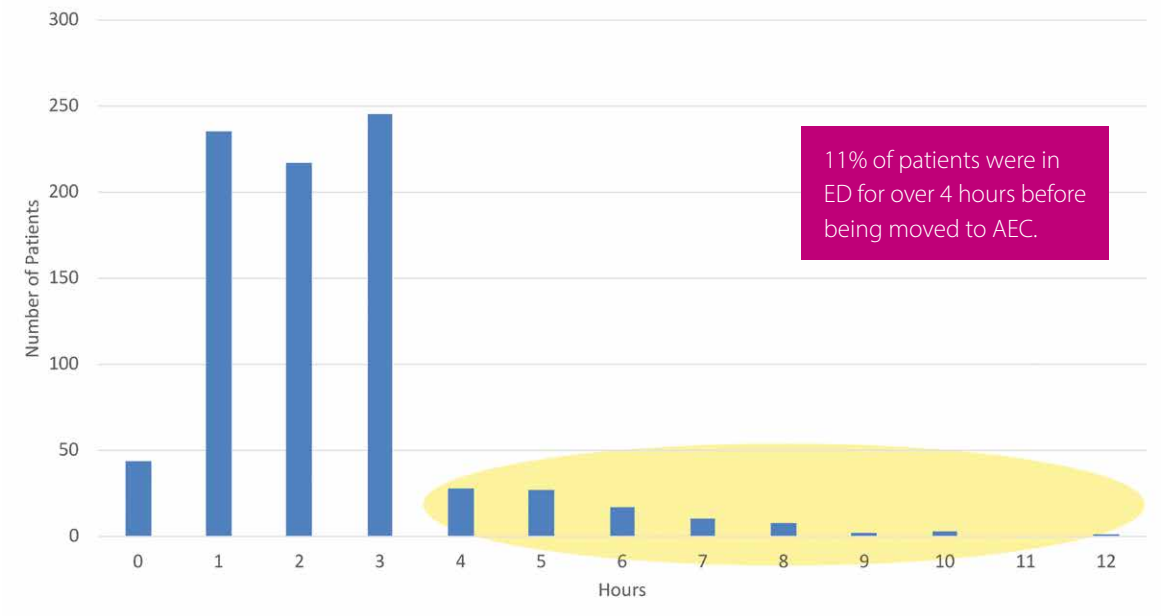
This number seemed to decrease from July and this was also mirrored in the number of patients referred to ACU by ED.



The team concluded that as the number of patients in ACU also decreased, it was possible that this decline in 'missed' and 'referred from ED' patients could be seasonal rather than due to a change in process. However, they were keen to understand this for certain. There was also concern about the number of 'missed' patients and the team wanted to understand how they could identify and stream more of these patients to ACU.



The analysis identified a tendency for 'breach avoidance' when streaming patients from ED to ACU. The team wanted to investigate this further and reduce the number of patients moved late to ACU.



Bradford Teaching Hospitals found the casefile review extremely useful, informative and rewarding. It also showed some great examples of good processes and practice, which was encouraging.

- 14 of the 23 (61%) patients reviewed that were managed in AEC were assessed as being appropriate.
- Overall there were some good examples of how current pathways are effective in AEC.
- Over half of the patients reviewed transitioned through ED first. 2/8 were returning patients but 75% were seen in ED on the same day as being referred to AEC, on average these patients spent 3.5hrs in ED before moving to AEC. As only 2 of these patients were referred by an external source, what can be done to ensure patients are streamed earlier to AEC?
- Some pathways restricted due to location and facilities in current AEC (no piped oxygen or treatment chairs) Consideration of this when planning new unit near to ED.
- There were 2 examples of great turn around by ED and using AEC the following day to complete treatment, allowing SDEC for those patients and the required timely follow up.
- Some referrals from external clinics still referred to ED prior to AEC.
- ED still processing some patients that could be streamed directly to AEC

Vignette 1: Good use of AEC by ED for urgent returning follow ups

ED ref, came into ED when service shut, return next day to AEC for CTPA, ?PE, had angio next day, no PE identified, news 0,

Vignette 2: Opportunity for greater direct AEC access

Outpt referral to ED central chest pain, history of angina, hypertension and TIA, news 1, to ACU for follow up, pain worse on breathing, ?angina, 12hr trop, admitted to AMU for trop,

The review highlighted an issue with wasted capacity in the ACU. This was something that the team was already aware of so they were pleased that the issue was highlighted.

	Managed in	Admitted 0-3 day LOS
Appropriate for AES	**Box 1: Success** 14	**Box 2: Missed opportunity** 1
Not Appropriate for AEC	**Box 3a: Wasted capacity** 9	**Box 4: Appropriate** 11
	Box 3b: Escalation use 0	
Totals	**23**	**12**
% right place	61%	92%

Armed with this evidence and information, the Bradford team was excited to enter into the next phase of the programme.

Project aims

They identified a number of project aims during the workshop sessions. These were:

Tackle problems and improve AEC

The hospital wanted to improve the existing ACU service. A new dedicated ACU, located with the ED in the 'Blue Zone', is scheduled to open in 2020. The team wanted to use the opportunity to resolve any ongoing problems and consider different ways of delivering SDEC before the new unit opened. They considered how they wanted the new unit to work and what improvements they needed to make. A number of new staff had come from different hospitals, bringing with them new ideas and experiences.

Reduce wasted capacity

The team was very aware - and now had evidence - of wasted capacity on ACU, particularly from the various specialties that used the unit to deliver hot clinics. At times, this restricted the number of assessment rooms that were available, causing capacity issues and resulting in ACU provision being paused, which was unsatisfactory. They wanted to reduce this waste.

Increase community referrals

There were frustrations from community colleagues that patients were not signposted back to the community and away from ED. They felt that with better understanding of community provision and enhanced relationships with community services this could be improved.

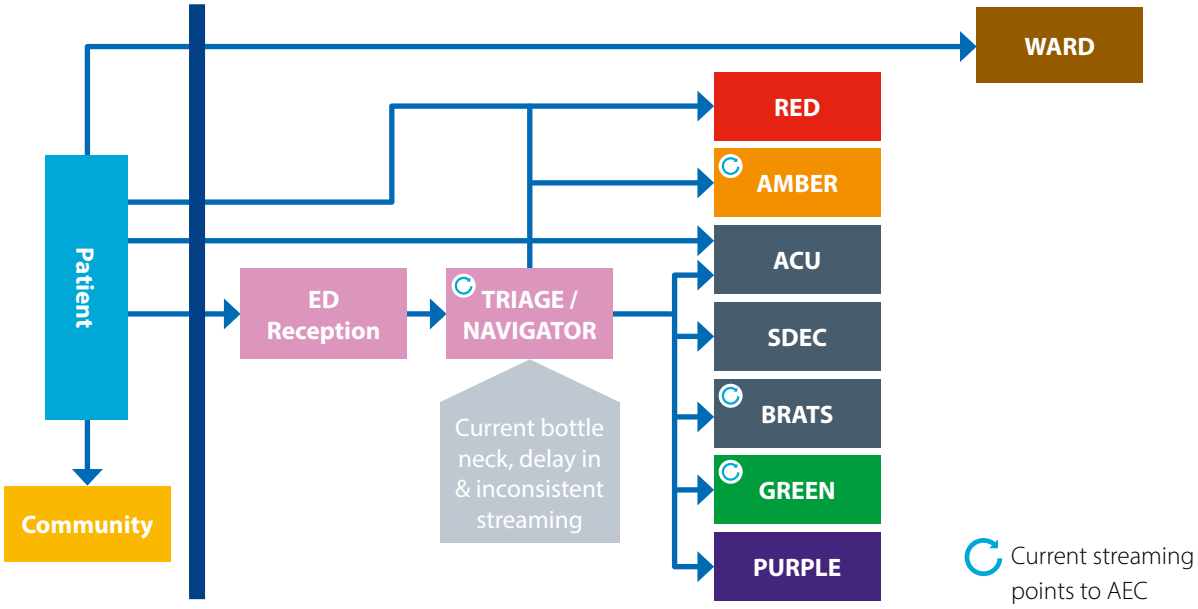
Improve streaming to AEC

The ACU team wanted to get the referral process right, in particular how GPs access AEC. Although there was a GP referral pathway in place, it could sometimes be a challenge to encourage GPs to use it, rather than the more familiar option of sending a patient to ED. The team believed that if a GP was ringing the hospital to arrange to send a patient in, the patient in question was not a blue light emergency and so it may not be appropriate for them to be sent to ED. Instead, they may require rapid assessment and some kind of same-day treatment. Or, they may need direct admission to a specialist ward. For example, if the patient clearly has a respiratory condition, it may be most efficient for them to go directly to a respiratory ward.

The team was keen for front door signposting to ACU to be improved. The data analysis showed that, prior to the programme, patients coming into ED weren't always identified quickly as being suitable for ACU. The bed bureau is managed as an admin function, but there is no specific pathway for the team to redirect patients to ACU. In addition, the hospital had another ward for patients with a length of stay of less than one day. The team was keen to review patient streams to ensure that, wherever possible, appropriate patients for ACU were coming onto the unit rather than being sent to this short stay ward.

Optimise the new unit

They also wanted to optimise the design of the new unit and encourage staff and patient engagement.



Current AEC Flow Map

What they did

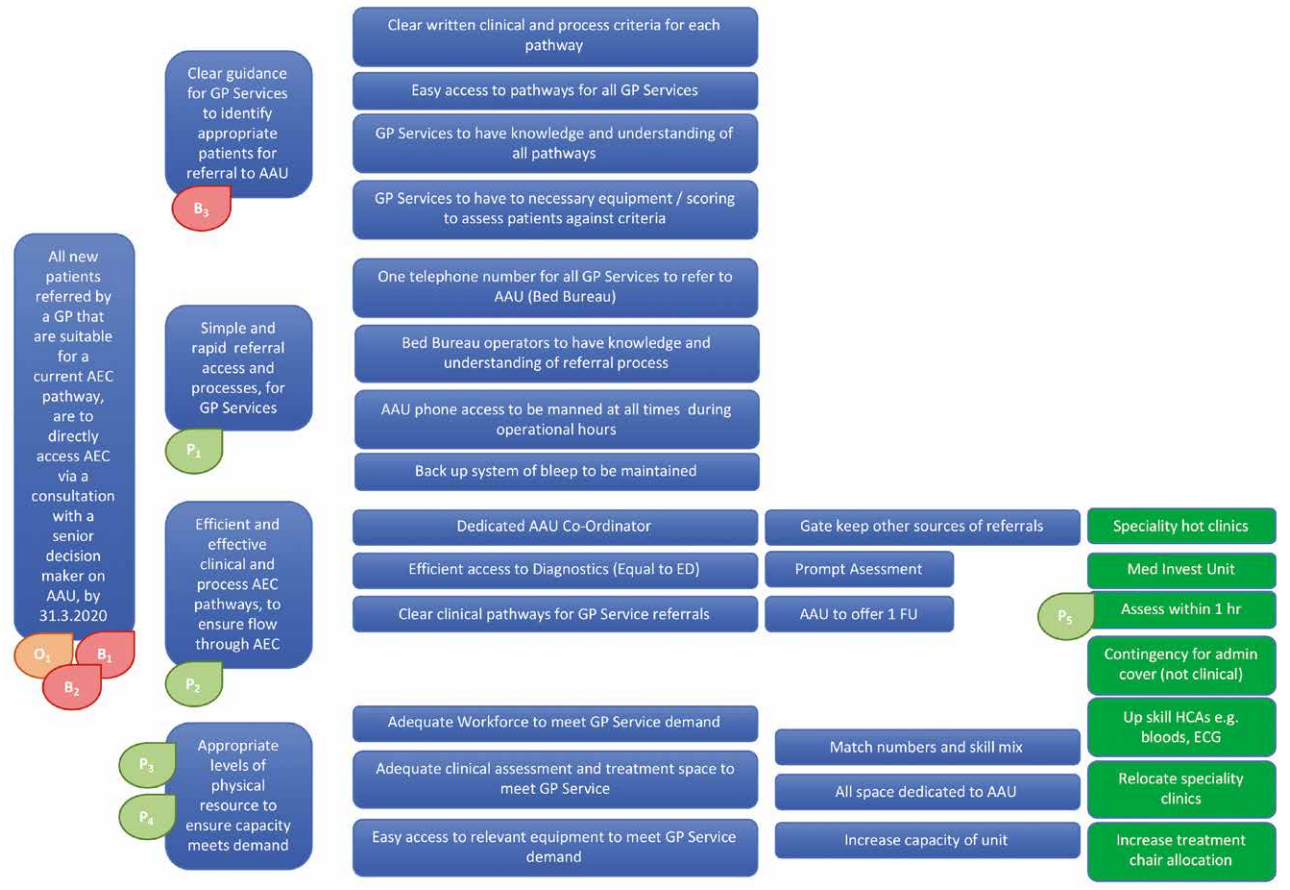
Bradford took a thorough approach to service improvement. They:

Appointed a dedicated SDEC Matron

Prior to joining the AEC Accelerator programme, Bradford had advertised for a new SDEC matron. The new SDEC matron, Julie Brook, was recruited from within the hospital and took up her post at the start of the programme. She found the AEC Accelerator Programme invaluable in supporting the development of her new role and participated in three workshops, including data analysis and casefile reviews. One of the challenges Julie faced was breaking down silo working among different specialties running hot clinics on the unit. She worked hard to forge links with the specialty clinicians by holding face-to-face discussions and encouraging a whole-unit mindset.

Created a driver diagram

The team decided that increasing the number of GP referrals to AEC would be its primary focus. It created a driver diagram stating its aim and setting out the steps it would need to take to achieve this. The aim was for all GP-referred patients who were suitable for AEC to have a consultation with a senior decision-maker on AAU to enable them to access the AEC pathway.



Project Driver Diagram

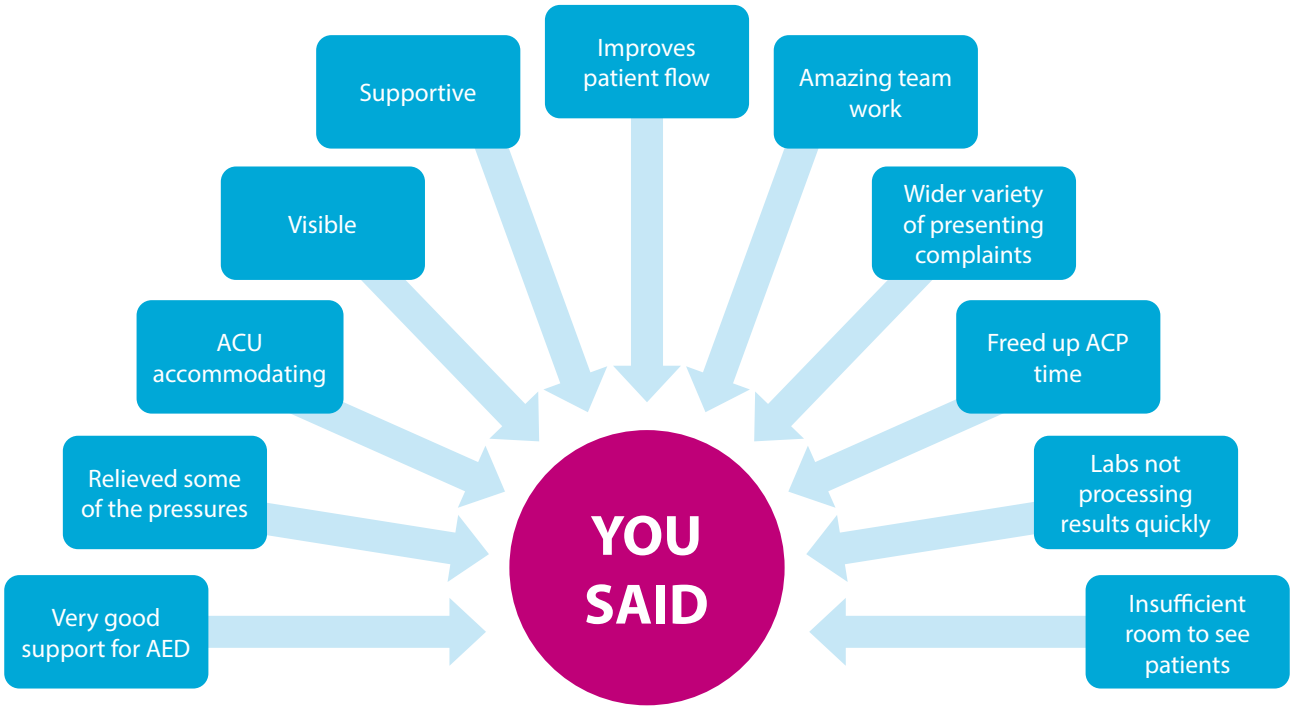
Improved the management of GP referrals

Having GP representation within the improvement team allowed Bradford to develop a really clear vision for improving the management of GP referrals. They introduced a single phone number for GPs to call, staffed by the bed bureau. Bed bureau staff now have a clear understanding of the referral process and send patients directly to AAU to be assessed for admission onto AEC, rather than sending them to ED.

Developed staff competencies

A competency framework was established to help staff identify patients who could be streamed to AEC from ED. It included an understanding of the system in place to prioritise patients according to clinical need and the importance of structured patient assessment.

Knowledge	Self-assessment (circle as appropriate)	Minimum standard for achievement	Expected date of achievement	Evidence submitted	Date of completion	Level achieved	Mentor sign off (print and sign)
Understand the importance of pre-hospital care information	N,AB,C,P,E	competent					
Understand the elements underpinning the structured approach to patient assessment	N,AB,C,P,E	Proficient					
Discuss the use of clinical assessment tools	N,AB,C,P,E	competent					
Understand the system in place to prioritise patients according to clinical need	N,AB,C,P,E	Proficient					
Understand local guidelines and policies on safeguarding adults and children and how to access support	N,AB,C,P,E	Proficient					
Complete safeguarding training	N,AB,C,P,E	competent					
Understand the NMC standards and local policy for documentation and record keeping	N,AB,C,P,E	competent					
Understand national guidelines	N,AB,C,P,E	competent					
Describe assessment frameworks and tools used to support emergency mental health assessment	N,AB,C,P,E	Proficient					



Tackled wasted capacity

SDEC Matron Julie Brook initiated discussions with specialty colleagues about moving hot clinics back into their own specialisms or other outpatient settings to reduce wasted capacity on ACU. Following these discussions, the TIA clinics are being moved out of ACU.

Audited current activity in AEC

This gave the team a clear picture of how the unit was operating and where improvement was needed. They engaged with staff and patients to find out how they felt when using or working on the unit. Feedback from staff was largely positive, with comments such as "freed up ACP time", "improves patient flow" and "amazing teamwork". However, staff also pointed out some weaknesses, such as "labs not processing results quickly" and "insufficient room to see patients". This provides useful information for future improvement. The audit identified that AEC needs the same access to diagnostics as ED and work is underway to make that happen. The team also audited patients who could have been treated in AEC but who were missed and went through ED and the admissions pathway instead.

Sped up the process

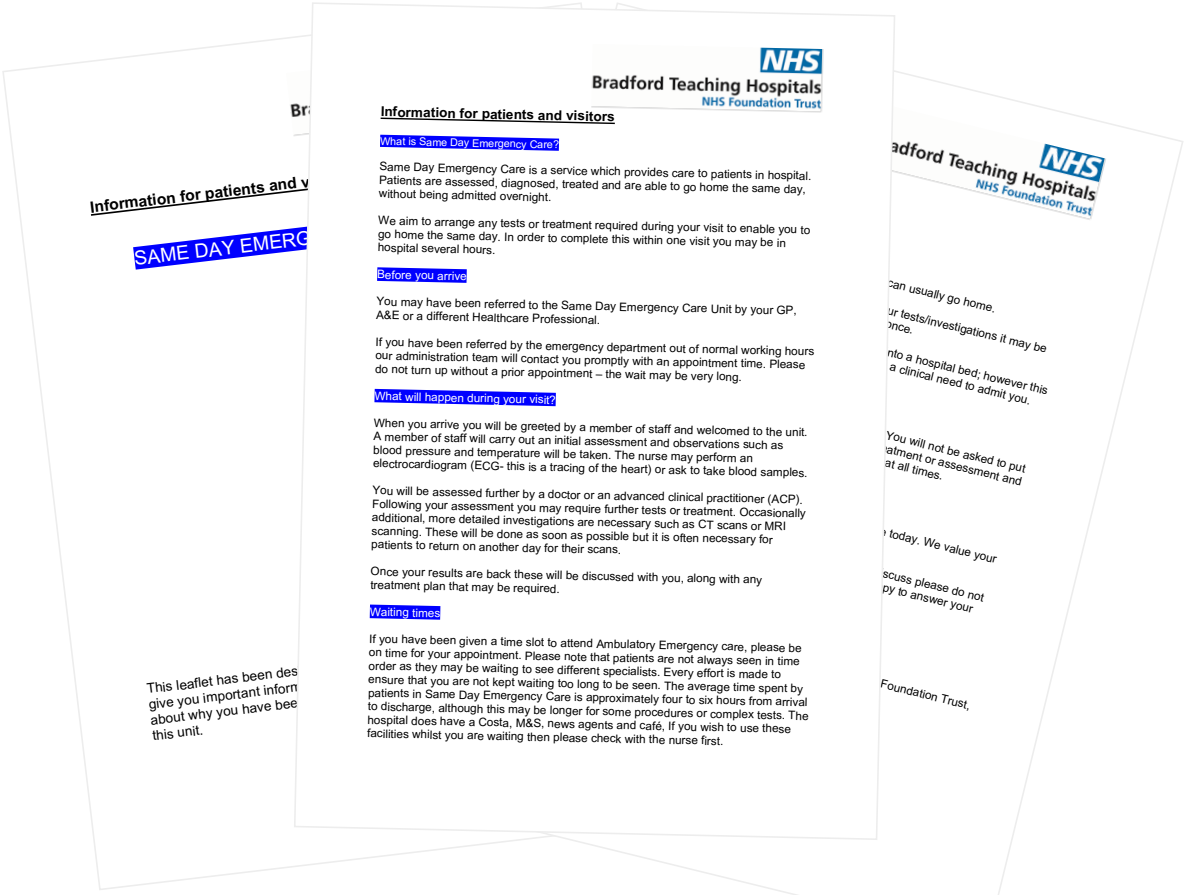
Bradford used the ED two-hourly board round to identify and stream patients earlier. They also considered how AEC clinical processes could be improved to decrease the time a patient waited before being assessed.

Produced a patient information leaflet

It was important that patients understood why they were being sent to AEC rather than ED so the team created a SDEC leaflet. It explains what the unit is all about and outlines what will happen during their visit, including how long they might be on the unit, so they have a good understanding of what to expect. A survey of the new leaflet amongst 50 patients received a positive response with comments like "this leaflet has been very informative as I didn't know much about this unit before".

Designed a new unit co-located in ED

Information gleaned during the improvement project is being used to help design the new ACU. An area in ED has been identified and the hospital is currently drawing up plans. It will combine with a new flow map to improve access and streaming to ACU. The original launch date of October 2020 may be delayed due to COVID-19.



Bradford Teaching Hospitals
NHS Foundation Trust

Information for patients and visitors

What is Same Day Emergency Care?

Same Day Emergency Care is a service which provides care to patients in hospital. Patients are assessed, diagnosed, treated and are able to go home the same day, without being admitted overnight.

We aim to arrange any tests or treatment required during your visit to enable you to go home the same day. In order to complete this within one visit you may be in hospital several hours.

Before you arrive

You may have been referred to the Same Day Emergency Care Unit by your GP, A&E or a different Healthcare Professional.

If you have been referred by the emergency department out of normal working hours our administration team will contact you promptly with an appointment time. Please do not turn up without a prior appointment – the wait may be very long.

What will happen during your visit?

When you arrive you will be greeted by a member of staff and welcomed to the unit. A member of staff will carry out an initial assessment and observations such as blood pressure and temperature will be taken. The nurse may perform an electrocardiogram (ECG- this is a tracing of the heart) or ask to take blood samples.

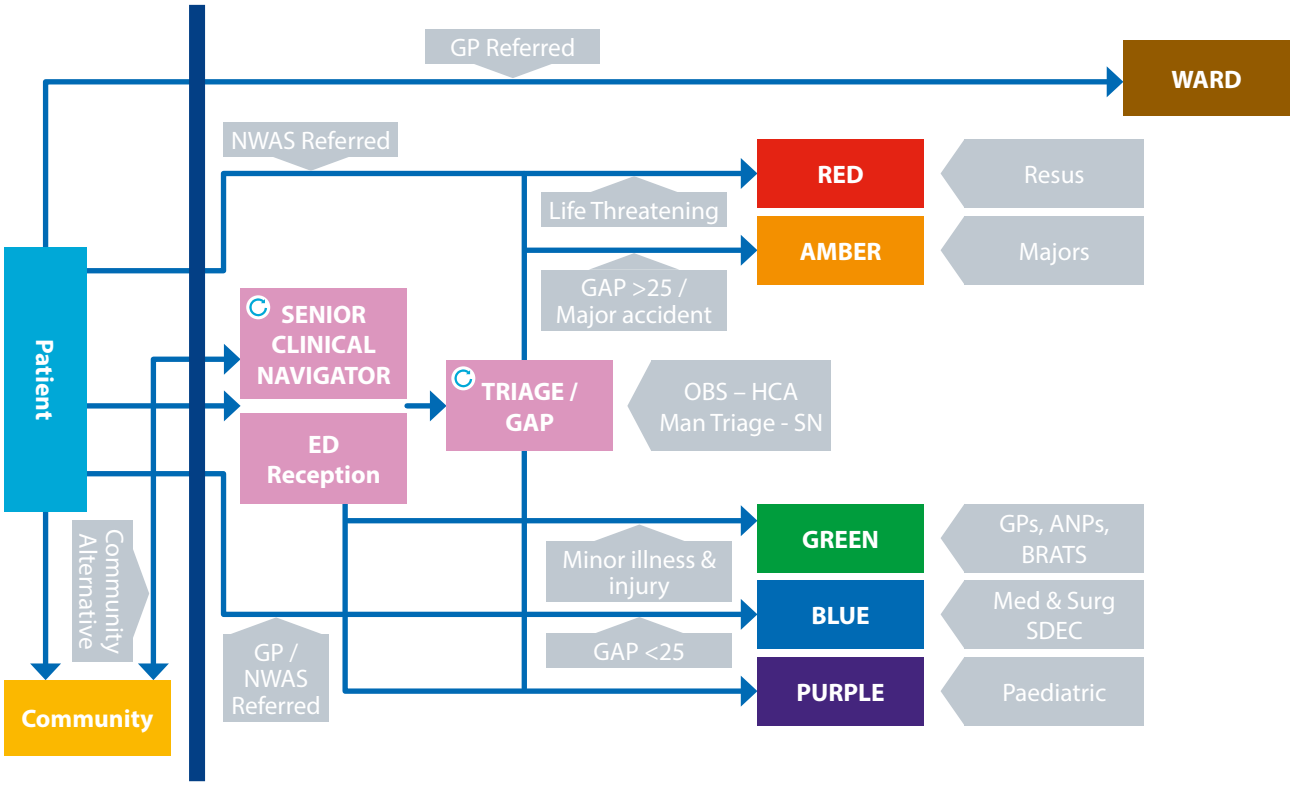
You will be assessed further by a doctor or an advanced clinical practitioner (ACP). Following your assessment you may require further tests or treatment. Occasionally additional, more detailed investigations are necessary such as CT scans or MRI scanning. These will be done as soon as possible but it is often necessary for patients to return on another day for their scans.

Once your results are back these will be discussed with you, along with any treatment plan that may be required.

Waiting times

If you have been given a time slot to attend Ambulatory Emergency care, please be on time for your appointment. Please note that patients are not always seen in time order as they may be waiting to see different specialists. Every effort is made to ensure that you are not kept waiting too long to be seen. The average time spent by patients in Same Day Emergency Care is approximately four to six hours from arrival to discharge, although this may be longer for some procedures or complex tests. The hospital does have a Costa, M&S, news agents and café. If you wish to use these facilities whilst you are waiting then please check with the nurse first.

Patient information leaflet



What made this project successful?

From the beginning of the project, the team at Bradford showed great motivation, enthusiasm and a strong desire to change. They ensured that the right team was in the room for each of the AEC Accelerator programme workshops, with a diversity of representatives including a GP with an interest in emergency admission, a former ED clinician and colleagues from the CCG. As many as 16 people attended certain sessions. The entire team was engaged and focused, sharing many of the same frustrations. Driving the whole thing forward was Simon Kirk, general manager acute care and Julie Brook, SDEC matron.

The team shared evidence of the changes made during their involvement in the AEC Accelerator Programme, showcasing their own successes and helping to encourage other participants.

From the start, Bradford thought carefully about stakeholder engagement and involved a wide range of participants in its improvement work, including community colleagues, nurses and doctors from ACU and ED, statisticians, and the improvement lead from the Trust. As a consequence, there was strong support from the community and CCG colleagues.

Challenges

The team faced some significant challenges. During its time on the programme the hospital was undergoing a CQC inspection but, despite this, they managed to maintain a good level of motivation.

Some of the ED clinicians proved difficult to engage. This was partly due to misunderstandings about what ACU was trying to achieve. By explaining that ED and ACU are two distinct operations with different objectives, the team was able to improve understanding and overcome some of the initial concerns.

Silo working was another challenge among the specialties running hot clinics on the unit. The new SDEC Matron set out to address this and forge closer links between the different teams. An area of great frustration for the team was boarding in ACU to prevent breaches. This proved difficult to manage, as decisions were being made from outside the unit by senior level staff.

However, by far the greatest challenge to the project was the arrival of COVID-19 in early 2020 which led to a suspension of improvement work to allow the hospital, like every other, to concentrate on the crisis caused by the pandemic.

How the AEC Accelerator Programme helped

Being part of the AEC Accelerator Programme gave the team reassurance not only that they had identified solutions to some of the problems they faced, but also that many of these problems were the same as those experienced by other trusts. In areas where they were ahead of the curve, the team felt proud of their progress. The experience of other trusts helped to inspire and encourage them.

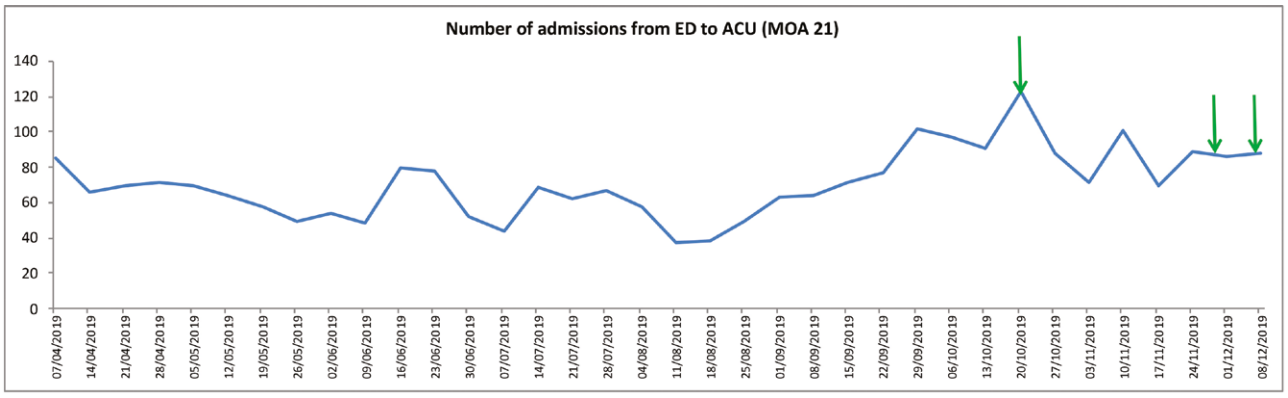
The workshops provided time and space for a diverse team of people to come together to discuss the issues they were all facing. A facilitated approach kept them on track. A member of the AEC Network who helped to facilitate the AEC Accelerator Programme said "I've been a clinician aiming to deliver service improvement. It's hard - you want to deliver the best outcomes but it's tough to do this alongside your day job. I tried to support Bradford every step of the way, helping to pull all of the information together – driver diagram, measures, and so on – so they had something tangible to work with. I kept them on target and challenged some of the things that people said, from my perspective as a neutral observer. There were some heated discussions, but in the end everyone felt they had been very productive."

Key learning

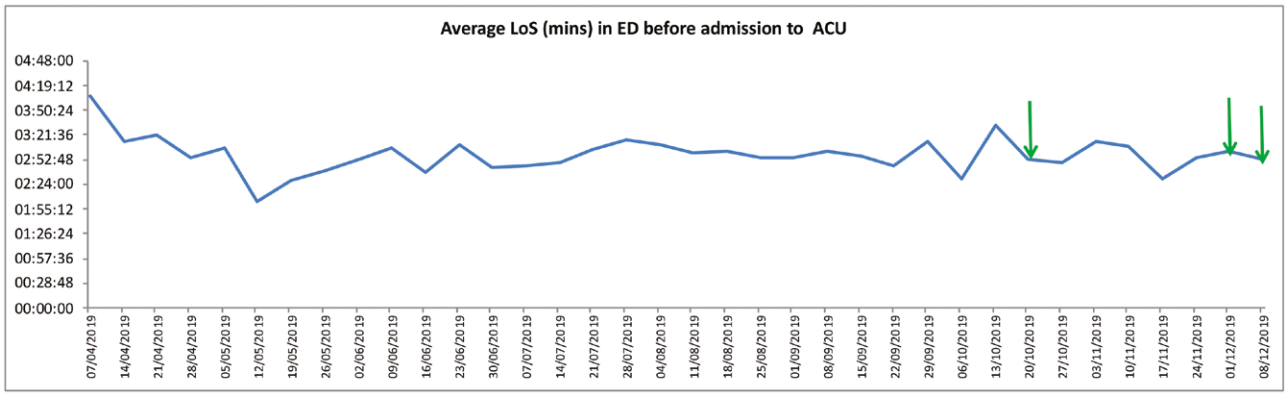
Bradford quickly identified that their system had to change if they were to achieve the improvements they wanted to make. They were thorough in their evidence gathering and carried out detailed root cause analysis of their improvement theories to prove them right before implementing any changes.

Impact

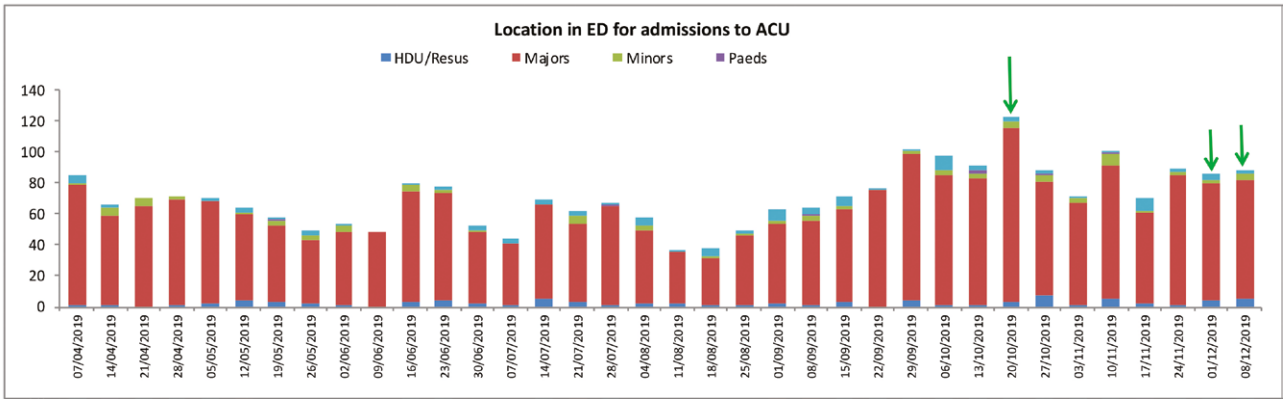
The graphs below show some of the early impacts of the programme. Unfortunately, the COVID-19 crisis has prevented more in-depth data from being collected at this point.



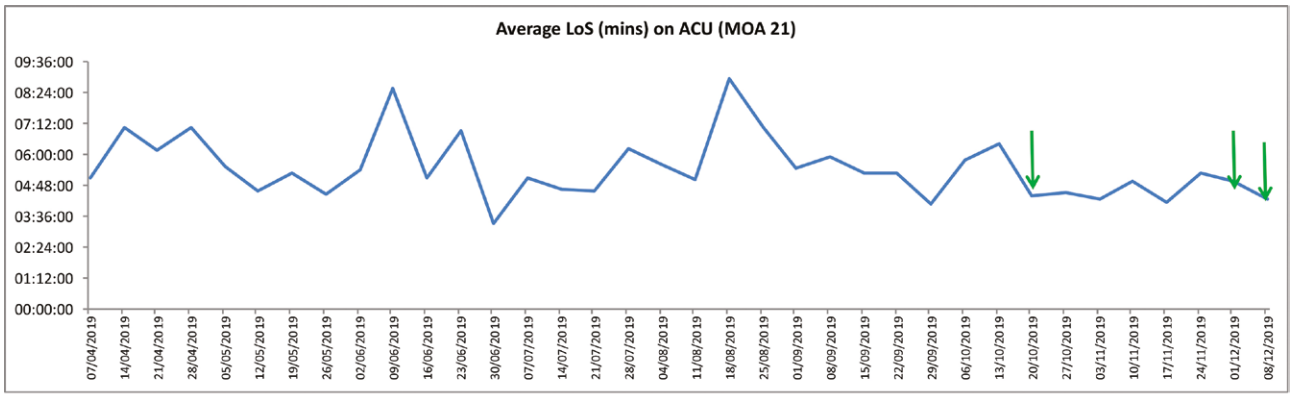
Bradford started the programme in early September 2019 and it is clear that their efforts from that point onwards increased the number of patients admitted from ED to ACU. To the end of December 2019 this increase was maintained.



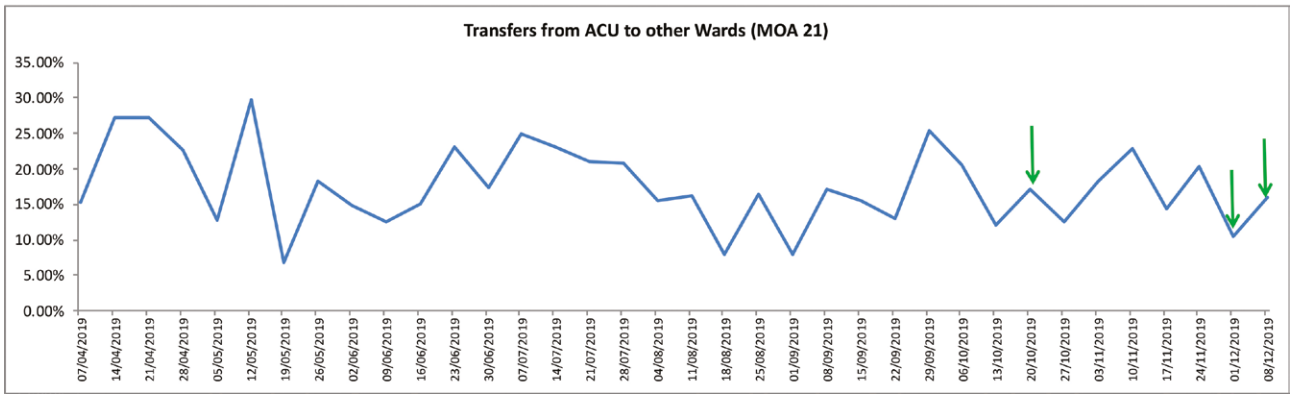
From the original data analysis it is clear that the team has started to impact the early identification and streaming of patients from ED to ACU, but there is still work to do. Much of this involves learning, experience and culture change, so will take time. The move to the new unit should help with this.



Since Bradford's participation in the AEC Accelerator Programme, there has been an increase in the number of patients from ED to ACU. This graph shows that the majority of these come from the Majors department, which is encouraging as it shows the team is streaming in the right area.



There has been a decrease in length of stay in ACU since the end of August 2019. The team has sustained this throughout the AEC Accelerator Programme, despite the increase in the number of referrals. This is encouraging, suggesting that they have improved processes and capacity in line with demand.



This graph demonstrates that the ACU has an admission rate around the recommended average of 10-15%.

Conclusion

A member of the Ambulatory Emergency Care Network who worked with Bradford said "Despite its challenges, the Bradford team has achieved a lot in a short space of time and this is testament to their focus and dedication, which they demonstrated from the very beginning. The unprecedented situation of COVID-19 will challenge the team further but they have laid a great foundation to support the surge. Once the pandemic is over they will, undoubtedly, pick up the reins again and continue on their improvement journey."

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